



THE HANFORD SITE

Hanford Site Cleanup Plan

Ben Harp, Deputy Manager
Office of River Protection

Brian Stickney, Acting Deputy Manager
Richland Operations Office

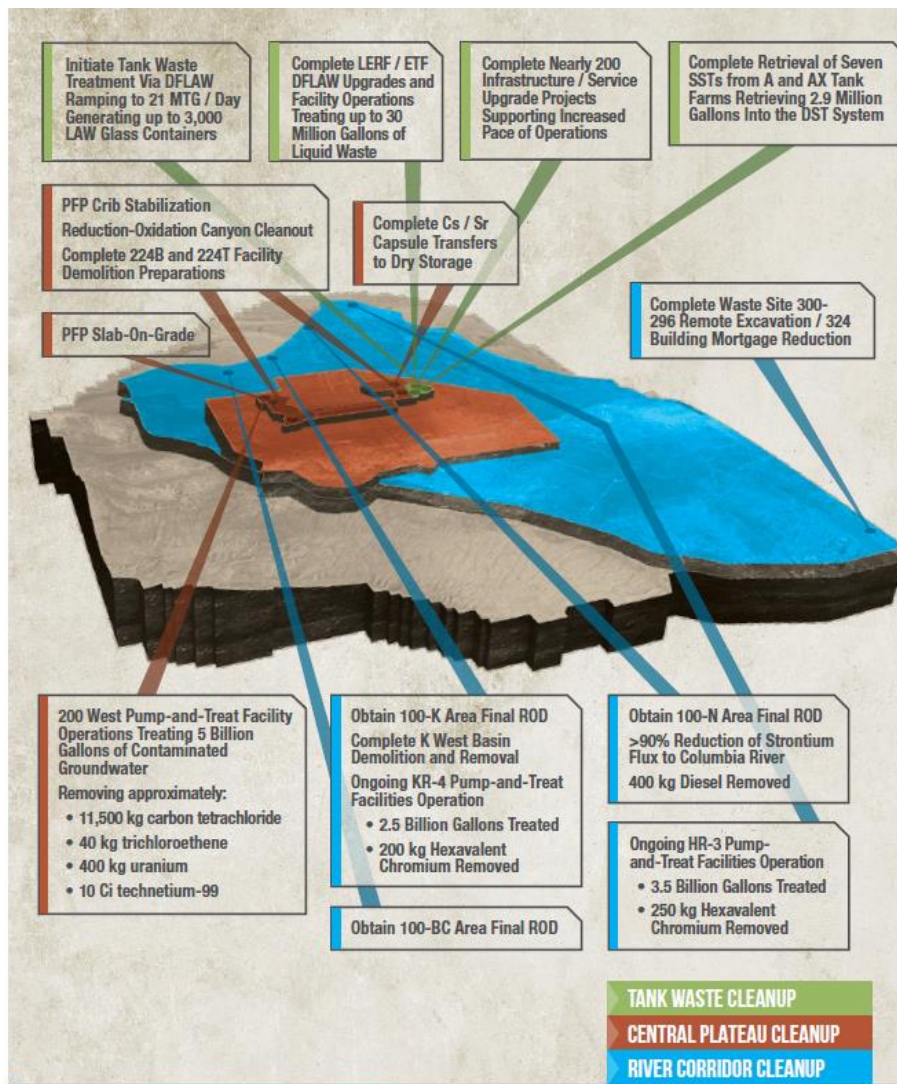
February 10, 2021



Objective of the briefing: Provide Hanford Advisory Board (HAB) members an overview of the changes to the revised Hanford Site Cleanup Plan.

What is being briefed? An overview of the updated Hanford Site Cleanup, including planned accomplishments.

What do we want the HAB to do with this information? Use the information provided to inform Hanford Site Cleanup Priorities advice.



Introduction

- DOE Cleanup Plan outlining the near-term scope execution and accomplishment at the Hanford Site
- Informs and integrates with DOE's annual Key Performance Goals, Hanford Integrated Priority List, and budget formulation processes
- Provides focus on mission objectives and the near-term strategy

Critical Activities:**TANK WASTE**

- ✓ Tank-Side Cesium Removal (TSCR) Pretreatment System delivered and installed
- ✓ Complete all Low-Activity Waste (LAW) turnovers to startup
 - › Complete Tank Farm waste feed delivery upgrades
- ✓ Finalize program and processes to qualify tank waste to meet waste acceptance criteria
- ✓ Receive first immobilized LAW transporter
 - › Complete Effluent Treatment Facility (ETF) secondary-waste upgrade
- ✓ Complete Waste Treatment and Immobilization Plant (WTP) to Liquid Effluent Retention Facility (LERF) transfer line tie-in

CENTRAL PLATEAU

- › Complete and close out Plutonium Finishing Plant to slab on grade
- ✓ Plutonium Finishing Plant crib stabilization
- ✓ Initiate reduction-oxidation canyon cleanout
- ✓ Initiate capsule storage area construction
- ✓ Complete Integrated Disposal Facility safety analysis, permitting and upgrades to support Direct-Feed Low-Activity Waste (DFLAW)
- ✓ Obtain 200-BP-5 and 200-PO-1 interim record of decision (ROD)

RIVER CORRIDOR

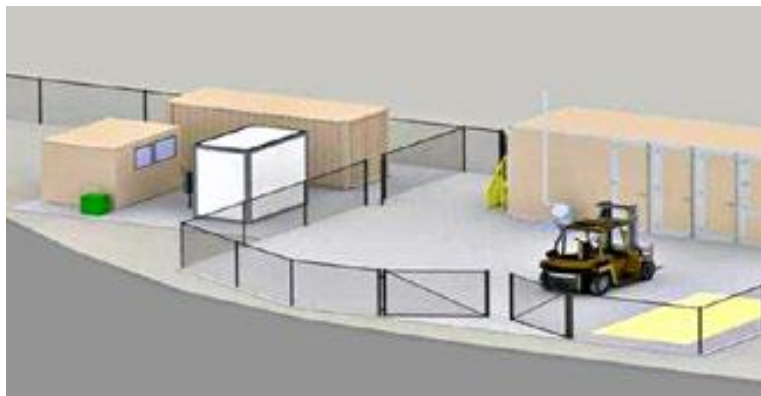
- ✓ Continue K West Basin deactivation
 - › Complete removal of 324 Building B-Cell floor
- ✓ Obtain 100-BC Area ROD

✓ **COMPLETE**
› **CARRYOVER**

Critical Activities:

TANK WASTE

- Transition all WTP LAB, LAW and Balance of Facilities systems to commissioning (excluding the Effluent Management Facility [EMF])
- Complete TSCR (pictured) readiness to operate
- Complete EMF construction
- Complete scheduled LERF/ETF DFLAW upgrades
- Complete construction on TX Farm surface barrier



CENTRAL PLATEAU

- Complete capsule storage area construction
- Complete Plutonium Uranium Extraction Plant removal action work plan
- Complete 200 East Area sewer consolidations
- Complete overlay of interior 200 East Area roads
- Install mobile office trailers in 200 East Area (emergent COVID-19 work)

RIVER CORRIDOR

- Complete K West Basin garnet-and-sand filter removal
- Submit 100-BC Area Remedial Design Report / Remedial Action Work Plan for regulatory review

- Complete retrieval of AX-102 and AX-104 single-shell tanks (consent decree Milestone B-3)
- Resume 242-A Evaporator operations
- Complete WTP loss-of-power testing
- Transition EMF to Commissioning
- Complete startup of first and second LAW Facility melters
- Complete WTP water test run
- Start LAW Facility cold commissioning with simulated tank waste
- Complete construction of LERF Basin 41

- Complete LAW Facility Operational Readiness Review to authorize hot commissioning
- Initiate Integrated Disposal Facility operations
- Initiate hot commissioning of WTP LAW Facility and EMF (pictured)
- Resume 242-A Evaporator operations
- Complete AX Farm retrievals



- Initiate A Farm retrieval
- Initiate LAW waste treatment operations (consent decree Milestone A-9 Interim)
- Complete reconditioning of 230 kV transmission system
- Complete construction of U Farm surface barrier
- Increase DFLAW operations to treatment capacity
- Complete activation of cross-site transfer system
- Resume WTP High-Level Waste Facility construction (pictured)



- Complete demolition preparation of 224B facility
- Complete construction of Waste Encapsulation and Storage Facility modifications
- Install high-capacity fiber-optic lines to the Central Plateau
- Replace 200 West Area 1.1-million-gallon potable water tank

- Initiate deactivation, decommissioning, decontamination, and demolition (D4) of the 224T Facility
- Eliminate all IT services from Gable Mountain – West
- Initiate transfer of Cs and Sr capsules to capsule storage area (pictured)
- Submit conceptual design for contact-handled transuranic waste capability
- Replace single-circuit distribution poles



- Obtain 100-N and 100-K Area RODs
- Continue K West Basin D4 process
- Continue advancing 105 K East Reactor to Interim Safe Storage
- Complete K West Basin characterization and dewatering
- Submit 100 K and N Area Remedial Design Report / Remedial Action Work Plans for regulatory review
- Replace 181B Vertical Turbine Pumps
- Complete Waste Site 300-296 remote excavation / 324 Building mortgage reduction

ORP Funding Summary for Fiscal Year 2020-2021

PBS	Control Point Title	FY 2020 Enacted	FY 2021 Enacted
ORP-0014	Tank Waste Activities	\$775,000	\$784,000
ORP-0014A	Low-Level Waste Offsite Disposal	10,000	0
<i>Subtotal Tank Waste Activities</i>		<i>\$785,000</i>	<i>\$784,000</i>
ORP-0060	18-D-16 Waste Treatment and Immobilization Plant - LBL / DFLAW	\$776,000	\$786,000
ORP-0060	01-D-416 High-Level Waste Facility	25,000	25,000
ORP-0060	01-D-16E Pretreatment Facility	15,000	0
<i>Subtotal Waste Treatment Project</i>		<i>\$816,000</i>	<i>\$811,000</i>
ORP-0070	WTP Commissioning	\$15,000	\$50,000
Total - ORP	ORP Funding Summary	\$1,616,000	\$1,645,000

LBL = Analytical Laboratory, Balance of Facilities, and Low-Activity Waste Facility
 DFLAW = Direct-Feed Low-Activity Waste

(\$ in Thousands)

RL Funding Summary for Fiscal Year 2020-2021

PBS	Control Point Title	FY 2020 Enacted	FY 2021 Enacted
RL-0011	Plutonium Finishing Plant	0	\$17,359
RL-0013C	Solid Waste Stabilization and Disposition - 200 Area	\$176,855	182,340
RL-0030	Soil and Water Remediation - Groundwater / Vadose Zone	138,995	116,966
RL-0201	Hanford Sitewide Services	338,950	353,335
<i>Subtotal Central Plateau Remediation</i>		<i>\$654,800</i>	<i>\$670,000</i>
RL-0040	Nuclear Facility D&D - Remainder of Hanford	\$102,427	\$101,044
RL-0041	Nuclear Facility D&D - River Corridor Closure Project	133,675	131,435
<i>Subtotal River Corridor and Other Cleanup Operations</i>		<i>\$236,102</i>	<i>\$232,479</i>
RL-0013C	18-D-404 WESF Modifications and Capsule Storage	\$11,000	\$15,000
RL-0020	Safeguards and Security	86,778	96,300
RL-0042	Nuclear Facility D&D - Fast Flux Test Facility Project	2,500	2,500
RL-0100	Richland Community and Regulatory Support	10,121	8,621
Total - RL	RL Funding Summary	\$1,001,301	\$1,024,900

D&D = Deactivation and Decommissioning; WESF = Waste Encapsulation and Storage Facility

(\$ in Thousands)

- Initiation of tank waste treatment via DFLAW and continuation of single-shell tank retrievals
- Majority of River Corridor scope completed, including K East Reactor interim safe storage, K West Basin demolition and 300-296 remote excavation
- Continued focus on Central Plateau risk-reduction activities